

CLAIMS

What is claimed is:

- 5 1. A method for prophylaxis or treatment of an inflammatory condition, said method comprising the steps of:
 providing a patient having an inflammatory condition; and
 administering to said patient a therapeutically effective amount of a composition comprising an NAD-related compound in a form that is accessible to a receptor molecule, conveyed in a pharmaceutically acceptable carrier vehicle, wherein said composition reduces the degree of said inflammatory condition in said patient.
- 10 2. The method of claim 1, wherein said inflammatory condition is selected from the group consisting of intestinal epithelial inflammation, endotoxemia, sepsis, hemorrhagic shock and pancreatitis.
- 15 3. The method of claim 2, wherein said intestinal epithelial inflammation is Crohn's disease or ulcerative colitis.
- 20 4. The method of claim 1, wherein said composition is administered to said patient enterally.
- 25 5. The method of claim 4, wherein said composition is administered using an enteric-coated formulation.
- 30 6. The method of claim 1, wherein said composition is administered to said patient systemically.

7. The method of claim 1, wherein said NAD-related compound is nicotinamide adenine dinucleotide (NAD⁺) or cyclic adenosine diphosphate ribose (cADPR).

5 8. The method of claim 1, wherein said NAD-related compound is selected from the group consisting of phosphorothioate analogues, N3'→P5' phosphoroamidate analogues and analogues with conformationally locked sugar rings.

10 9. A method for testing the effectiveness of a candidate compound for prophylaxis or treatment of an inflammatory condition, said method comprising the steps of:
providing said candidate compound; and
testing said candidate compound for an ability to inhibit
15 nitric oxide (NO[·]) production in an *ex vivo* inflammation model.

10. A method for testing the effectiveness of a candidate compound for prophylaxis or treatment of an inflammatory condition, said method comprising the steps of:
20 providing said candidate compound; and
testing said candidate compound for an ability to inhibit hyperpermeability in an *ex vivo* inflammation model.

11. An article of manufacture comprising packaging material and
25 a therapeutic composition contained within said packaging material, wherein the therapeutic composition is therapeutically effective for prophylaxis or treatment of an inflammatory condition, and wherein the packaging material comprises a label that indicates that the therapeutic composition can be used for
30 prophylaxis or treatment of an inflammatory condition, and
wherein said therapeutic composition comprises an NAD-related compound, in a form that is accessible to a receptor

molecule, conveyed in a pharmaceutically acceptable carrier vehicle.

12. The method of claim 11, wherein said NAD-related compound is
5 nicotinamide adenine dinucleotide (NAD⁺) or cyclic adenosine
diphosphate ribose (cADPR).

13. The method of claim 11, wherein said NAD-related compound is
selected from the group consisting of phosphorothioate analogues,
10 N3'→P5' phosphoroamidate analogues and analogues with
conformationally locked sugar rings.

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